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The Effect of Small Repeated Doses of Phenothiazine on Strongylid Infestation in the Horse

T. E. GIBSON,

VETERINARY LABORATORY, MINISTRY OF AGRICULTURE AND FISHERIES

The high efficiency of phenothiazine, given in a single full dose, as an anthelmintic for horses and sheep is now well established and attention is, at the present time, being directed to a consideration of the effect of different methods of dispensing and administration upon the anthelmintic efficiency of the drug. Although thousands of horses have been treated with phenothiazine without untoward results, there have been a few instances where fatal intoxication has followed the administration of an ordinary anthelmintic dose. The suggestion has been made, therefore, that instead of employing one full dose the drug could be more safely administered to weak and anaemic horses, and to brood mares, in the form of daily doses of 1, 2 or up to 10 grammes until the full therapeutic dose had been given. By this means it was hoped to avoid, without loss of anthelmintic efficiency, the toxic effects which have occasionally been observed in such animals. This system of treatment was tried out by Roberts (1941) who reported that 1 gramme of phenothiazine administered to a pony each day for 30 days was "seemingly as effective as a single dose of 30 grammes." Examination of the faeces of this pony before treatment showed 600 strongylid eggs per gramme whilst three weeks after treatment the count had fallen to zero. Reference is made to the use of phenothiazine in divided doses in the report of the Chief of the Bureau of Animal Industry (U.S. Department of Agriculture) (1941) and later Foster and Habermann (1944) gave a fuller account of the same experiments. Three ponies, maintained on an infected pasture, received small doses of phenothiazine at the rate of 5 grammes per week and by the second week of treatment there was a considerable reduction in the numbers of strongylid eggs in their faeces. By the fifth week in two instances and by the seventh week in the third the faecal egg count had fallen to zero. It remained at this level during the rest of the 20 weeks of the experiment, by the end of which time 100 grammes of the drug had been administered to each pony, after which no further egg counts were made. An untreated control passed 3,000 to 4,800 eggs per gramme of faeces throughout the experiment. Howell and Britton (1942) have also reported on the use of small daily doses of phenothiazine in horses. They treated ten horses, whose average egg count before treatment was 1,360 per gramme, with 5 grammes of phenothiazine morning and night for three days and one month later the egg count had fallen to 40 per gramme. A further observation was carried out on a Percheron, weighing 1,750 pounds, which was given a dose of 1·2 grammes of phenothiazine twice daily for 16 days, total dose 38·4 grammes, and was reported to have been "successfully wormed." In their conclusions Howell and Britton state that "small repeated daily doses (1 to 5 grammes) of phenothiazine given until the therapeutic dose is reached, are efficient, and when given with a tonic are probably less dangerous than single large doses." Mention is also made of this method of administration of phenothiazine in the report of the Chief of the Bureau of Animal Industry (U.S. Department of Agriculture) (1942) in which it is reported that two horses received daily doses of 2 grammes mixed with the food for ten weeks (*i.e.*, a total dose of 140 grammes). Although no details of egg counts are given it is stated that the parasite load of the treated animals was gradually reduced, whilst in ten controls the parasite load increased during the observation period.

The reports mentioned above appeared to indicate that the administration of small daily doses of phenothiazine for limited periods would be effective in reducing the parasite burden of horses. The advantages of such a procedure might be very great since such small doses could be readily given in the form of a daily medicated feed and it was thought desirable to carry the critical observations a little further and to ascertain how far the supposed anthelmintic treatment was expelling the worms and to what extent the fall in egg count might be due to the inhibition of egg production resulting from the presence of a small amount of anthelmintic substance in the intestine.

MATERIALS AND METHODS

In the present investigation two ponies that were naturally infected with strongylid worms were used, each of which showed a count of some 1,600 eggs per gramme of faeces at the beginning of the experiment. The animals were housed during the whole of the observational period so as to preclude the acquisition of further infection after the experiment began. Faeces were collected daily from both ponies and the number of strongylid eggs present was estimated using a modified McMaster technique when the number was more than 100 per gramme and by the salt flotation method when the count fell below this level. The first pony, No. 140, received three courses of treatment, the first from April 26th, 1944, to May 30th, 1944, the second from August 23rd, 1944, to September 21st, 1944, and the third from January 1st, 1945, to January 30th, 1945. Daily doses of 1 gramme of dispersible phenothiazine suspended in about half a pint of cold water were given during the first course of treatment whilst on the second and third occasions non-dispersible phenothiazine was employed, 1 gramme doses being mixed with a little grain feed each day. The second pony, No. 126, received two courses of treatment, 1 gramme of the non-dispersible phenothiazine being mixed with the grain feed each day from July 17th, 1944, to August 15th, 1944, and from January 1st, 1945, to January 30th, 1945.

For 18 days at the beginning of the experiment cultures were prepared from the faeces of the ponies to ascertain whether the development of the strongylid eggs in the faeces was inhibited by the presence of small amounts of phenothiazine resulting from the administration of daily 1 gramme doses. The cultures were prepared from 50 grammes of faeces and were incubated for one week at 27° C.; the larvae subsequently being recovered by means of the Baermann apparatus in which the cultures were allowed to remain for 48 hours before the larvae were drawn off and counted. The counts were made by the usual dilution technique except where the larvae numbered less than 200, when they were counted individually. These observations were discontinued when the egg count fell to below 100 eggs per gramme.

Results

Since the observations extended over a period of some thirteen months it is impossible to include all the data in this brief report; the detailed figures are, however, kept at the laboratory of the Ministry of Agriculture and Fisheries, Weybridge, and are available for reference to anyone who may wish to consult them. The changes which were observed may, however, be summarised as follows:—

The egg count of pony No. 140 remained at the level of 1,000 to 1,500 eggs per gramme for the first eight days of the experiment, administration of phenothiazine having commenced on the second day, but during the next five days the count fell rapidly and at the end of this time was only 100 per gramme. The count remained below 100 per gramme, and for the most part below ten per gramme, until the 70th day of the trial; administration of the phenothiazine having ceased on the 35th day. On the 70th day a sudden rise in egg count took place and until the 91st day it remained within the range 500 to 1,000 eggs per gramme, after which it remained steady at the level 1,000 to 1,500 eggs per gramme.

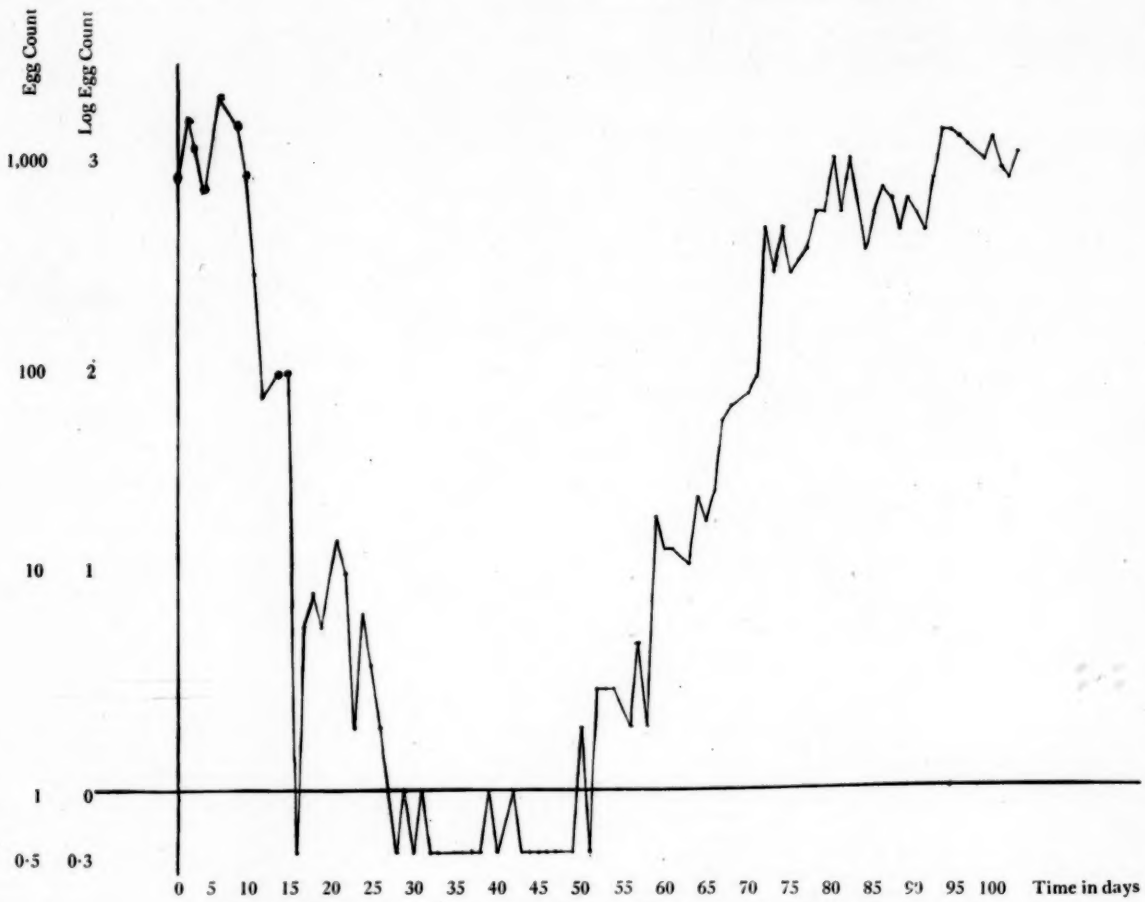
The second treatment began on the 120th day of the experiment and on the 122nd day a rapid fall in the egg count from 1,500 to 500 per gramme was observed and by the 128th day it had fallen to below 100 eggs per gramme, at which level it remained until the 184th day of the experiment, treatment having ceased on the 149th day. From the 184th to the 198th day a rapid rise was observed in the egg count and by the 198th day it had risen to the level of 1,000 to 1,500 eggs per gramme at which it remained until six days after the third treatment began.

The third course of treatment commenced on the 251st day of the experiment and ended on the 281st day. On the 257th day the egg count had fallen to less than 100 per gramme and it remained at this low level until the 317th day when it rose above 100 eggs per gramme. The count then increased rapidly and by the 326th day had reached 1,000 eggs per gramme and after this it remained at the level 1,000 to 1,500 eggs per gramme until observations were concluded 392 days from the beginning of the experiment. The egg counts for the first hundred days of the trial are plotted semi-ogarithmically on Graph 1 which shows the sudden fall of egg count, typical of successful anthelmintic treatment, but followed after an interval of 35 days by a sudden rise to the original level.

A somewhat similar effect was observed in pony No. 126. Initially the egg count was in the range of 1,000 to 2,000 eggs per gramme,

but on the seventh day after treatment began the egg count showed a sudden drop to 500 eggs per gramme, and by the 15th day had fallen to 100 per gramme. It remained at, or below, this level until the 47th day when a rise to 500 eggs per gramme took place, treatment having ceased on the 30th day. The egg count then remained above 500 eggs per gramme and at about the level of 1,000 eggs per gramme for the next 132 days.

The second course of treatment began on the 175th day and by the 179th day the egg count had fallen below 100 eggs per gramme. The count remained at this level until the 247th day, treatment having ceased on the 205th day. On the 247th day the count rose above 100 eggs per gramme and gradually returned to the level of 1,000 to 1,500 eggs per gramme at which it remained until the observation was concluded on the 316th day.



Graph Showing the Logarithm of the Egg Count of Pony No. 140 Plotted Against Time

Note.—To avoid the difficulty of representing $\overline{\infty}$ zero egg count has been taken as 0·5.

Table I

Showing Number of Larvae recovered from 50 Gramme Cultures of Faeces of Pony 140, together with the theoretical expectation of Larvae from 50 grammes of faeces calculated from the Egg Count

Days after Treatment began	Egg Count	Larvae recovered from 50 gramme Culture	Expectation of Larvae from 50 gramme Culture, calculated from the Egg Count
4	2,300	11,800	115,000
5	1,700	9,200	85,000
6	1,600	73	80,000
7	700	17	35,000
8	300	10	15,000
9	61	2	3,050
10	100	4	5,000
11	100	155	5,000
12	0	2	0
13	6	1	300
14	9	0	450
15	6	0	300
16	16	0	800
17	11	43	550
18	2	0	100
19	7	2	350
20	4	—	200
21	2	4	100

Table II

Showing the Number of Larvae recovered from 50 gramme Cultures of the Faeces of Pony 126, together with the theoretical expectation of Larvae from 50 grammes of Faeces calculated from the Egg Count

Days before or after Treatment began	Egg Count	Larvae recovered from 50 gramme Culture	Expectation of Larvae from 50 gramme Cultures calculated from Egg Count
6th day before treatment	1,000	24,800	50,000
5th " "	1,500	26,800	75,000
4th " "	2,000	—	100,000
3rd " "	1,700	20,900	85,000
2nd " "	1,900	19,250	95,000
1st " "	—	14,110	—
Day treatment began ..	2,000	—	100,000
1st day after treatment	1,900	15,400	95,000
2nd " "	1,700	4,500	85,000
3rd " "	1,400	1,050	70,000
4th " "	1,200	1,200	60,000
5th " "	1,700	1,900	85,000
6th " "	1,700	15	85,000
7th " "	500	7	25,000
8th " "	200	0	10,000
9th " "	100	—	5,000
10th " "	300	0	15,000
12th " "	300	0	15,000

The number of larvae recovered from the 50-gramme cultures of faeces of ponies Nos. 140 and 126 are shown respectively in Tables I and II. The results for pony No. 126 show that before treatment began the number of larvae actually recovered from a 50-gramme culture of faeces was much below the theoretical expectation calculated from the egg count, but it will be noted that there was a sharp drop in the proportion of larvae recovered on the second day after treatment began and by the sixth day larval development in the cultures was almost inhibited. Table I does not show any results earlier than the fourth day of treatment but again on and after the sixth day there was almost complete inhibition of larval development.

Discussion

The treatment of horses, carrying strongylid infestations, by the daily administration of 1 gramme of phenothiazine for 30 days caused a reduction of the faecal egg count to a very low level or to zero. After treatment ceased the egg count remained low for 35 days in pony No. 140 on all three occasions and in pony No. 126 with the second course of treatment. A rise in egg count followed and the previous maximum was attained after a further seven to ten days. Following the first course of treatment in pony No. 126, however, the egg count remained low for only twelve days after treatment ceased but the previous maximum count was not attained for some 35 days. It might be thought that this rise in egg count was due to the maturation of strongyloid larvae which were situated in the sub-peritoneal connective tissue and other parts of the body at the time the experiment began. Since the third treatment of pony No. 140 took place 36 weeks after the pony was housed the great majority of such larvae would have become mature and would have been affected by the third course of treatment. The fall in egg count which took place followed by a rise to the original level 36 days after treatment on this third occasion showed that another explanation must be sought.

The fall in egg count and its prolonged maintenance at a low level following the administration of 30 daily 1-gramme doses of phenothiazine must, therefore, be due to the inhibition of egg production by the worms. The phenomenon of inhibition of egg production by worms following anthelmintic medication has been known for many years, Mhaskar (1924) having pointed out that the administration of oil of chenopodium may inhibit the egg production of hookworms in man for as long as twelve days. It is, however, surprising to find that on four occasions this inhibition was prolonged by repeated small doses of phenothiazine for as long as five weeks after the last dose had been given, making a total of some eight weeks throughout which egg production by the worms was almost completely inhibited. The possibility of such prolonged inhibition of egg production does not appear to have been considered by other workers who have investigated the use of small repeated doses of phenothiazine in horses and who made their final egg counts not more than three or four weeks after the end of treatment. As egg production by the worms was inhibited for five weeks after the end of treatment in pony No. 140 an interval of at least six weeks must elapse before the final egg count for the evaluation of treatment is made.

Small repeated daily doses of phenothiazine may not be without significance in the control of strongylosis, since not only is egg production by the worms inhibited but also small amounts of phenothiazine in the faeces prevent the development of infective larvae from the eggs which are passed in the faeces. This latter fact has already been reported by several workers, Taylor and Sanderson (1940), Shorb and Habermann (1940), and Habermann and Shorb (1942), and the results set out in Tables I and II confirm their findings. Although small repeated daily doses of phenothiazine do not cause elimination of the worms from horses, such treatment does exert a profound effect in the reduction of pasture contamination and this may be illustrated as follows: during the period when egg production of the worms of pony No. 140 was inhibited by the use of phenothiazine the egg count was reduced from 1,500 to 10 per gramme, and since a horse passes some 35 pounds of faeces per day some 24,000,000 eggs would have been prevented from reaching the pasture each day. Of the 150,000 which are passed each day even under these conditions very few develop into third stage larvae in the presence of small amounts of phenothiazine in the faeces; continued administration of the drug would, therefore, almost eliminate pasture contamination. Foster and Habermann (1944) showed that small repeated doses of phenothiazine could be administered to horses for as long as 20 weeks without ill effect, but further work is necessary to confirm their findings. If the non-toxicity of small doses of phenothiazine repeated daily for long periods is demonstrated under varying farming conditions, this method of administration of phenothiazine should prove of great value in the control of equine strongylosis.

Summary

On five occasions the administration of daily doses of 1 gramme of phenothiazine for 30 days did not result in the elimination of the strongylid worms from horses. It did, however, produce a fall in egg count to a very low level or to zero and this was referable to the inhibition of egg production by the worms. This inhibition persisted for as long as 35 days after the cessation of treatment, although in one case a slight increase in the egg count took place twelve days after treatment ceased. During the period when phenothiazine was being administered the eggs passed in the faeces were prevented from developing into third stage larvae. The usefulness of this method of administration of phenothiazine in the prevention of pasture contamination is discussed.

Acknowledgment

I am greatly indebted to Dr. E. L. Taylor for his advice and encouragement during the course of this work and for his assistance in the preparation of this paper for publication.

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Specialisation*

Geo. F. Boddie, B.Sc., M.R.C.V.S.

Royal (Dick) Veterinary College

For very many years there seems to have been much talk of specialisation and the need for it in the field of veterinary science. But in spite of all this talk little seems to have been done to provide specialist services and these undoubtedly are required if our profession is to develop as we would all like. I have heard it said that our practitioners are to blame for not making more use of specialist services; surely this is a most unfair criticism when no adequate specialist service exists. It has been my experience that where any form of consultative or specialist service does exist the practitioners do make the fullest possible use of the facilities, even though they may be meagre.

The greatest difficulty in the way of any development of these specialist services has been the lack of any monetary provision for their establishment. In the present circumstances no veterinary surgeon could hope to make a livelihood by providing such a service in any particular branch of veterinary science. To put it quite bluntly, a serious obstacle in the way of this development of our work is the question of fee.

I suppose the veterinary investigation officer scheme was meant to provide a form of specialist service. While I have the greatest admiration and respect for individual veterinary investigation officers whom it has been my privilege to know, the scheme as a means of providing a genuine specialist service was bound to fail, because of certain fundamental errors in it. In the first place, the unfortunate veterinary investigation officer—often young and inexperienced—is expected to be a master of all aspects of the field of veterinary science—a manifest absurdity. The salaries offered for these posts do not attract men of experience and maturity, so the posts tend to be filled by new graduates without the background necessary for them to view their work in proper perspective. In the second place, the establishment of the veterinary investigation officers at agricultural colleges means that they have, to a considerable extent, to work on their own, and in many cases without suitable laboratory facilities.

The idea of a regional specialist service is sound, but for the service to be a success, it must be adequately staffed and properly equipped.

Perhaps you may think the plan I propose to lay before you might provide such a service.

I suggest that in place of the veterinary investigation officer and his assistant, there should be established veterinary investigation centres.

* Presidential Address to the Scottish Metropolitan Division, N.V.M.A., Annual Meeting, Edinburgh, April 4th, 1945.

The location of these centres should be chosen to meet the needs of individual areas, but I think they should be, as far as possible, placed in the proximity of the regional offices of the Animal Health Division. The centre would then not only be in close contact with the practitioners in the area, but also with the local staff of the Animal Health Division. One would hope that the veterinary investigation centre would then become the focal point of veterinary activity in that area, and that the intermingling of practitioners with the staff of the Animal Health Division and that of the investigation centre would lead to a spirit of close co-operation that could do much to extend our sphere of professional influence. The veterinary investigation centres would naturally work in collaboration with the nearest veterinary institute, whether research institute or college, and should be able to make much useful material available to these institutes.

The detailed composition of the staff of the veterinary investigation centre would vary somewhat according to the character of the district, but I submit that it should consist of not less than four professional men with adequate technical assistants.

For example, one would visualise the staff required for one typical centre consisting of:—

A clinical pathologist, a chemist, a parasitologist and the equivalent of a gynaecologist. The leader of this little team would be chosen according to personality and experience and might be any one of the four.

Now a few details in regard to the members of the team. The clinical pathologist would, in most cases, require to be as much a bacteriologist as a pathologist, though in some centres there might be both a pathologist and bacteriologist. In order that the clinical pathologist may have an adequate background, his training after graduation should consist of a period in general practice, followed by the necessary training in laboratory technique.

While one would like the chemist to be possessed of a veterinary qualification, it must be realised that there are very few veterinary chemists, but ultimately we should look forward to the day when the chemist would have a veterinary qualification and a clinical bias, and could then justly be termed a veterinary chemist. His sphere of work would not only include the examination of material such as blood and urine, but would also deal with the analyses of soil, herbage and much other material of which a chemical investigation is required.

The parasitologist must be fully trained in field work, and if not a veterinarian, must have a sufficient knowledge of the problems of veterinary parasitology.

The individual I have described as the equivalent of a gynaecologist would require very special training. We have recently seen what happened when raw, newly fledged graduates were given a brief training in the field work of bovine infertility and sterility—the results as a whole have not been impressive.

As much infertility is due to causes not directly associated with the genital system, the specialist in this class of work must be possessed of the broad clinical outlook that can only be gained in general practice. Only after gaining this outlook should he undergo specialised training. I consider it most important that the specialised training should include a rigorous course in the discipline required to ensure surgical asepsis.

You will notice that I have not included in my team a surgeon. This exclusion is deliberate for I am convinced that if veterinary surgery is to attain full stature, major operations must be performed in properly equipped surgical hospitals. To begin with these hospitals will probably be an integral part of the veterinary colleges or their field stations, but if the need arose the facilities of a surgical hospital could be provided at a veterinary investigation centre with the necessary trained surgical staff. A peripatetic surgical consultant attached to a hospital—such as exists in some of our colleges—could be available for consultation through the veterinary investigation centres in the area surrounding that hospital.

The demand for trained specialists for the veterinary investigation centres would be reflected in the teaching colleges, which would require to provide increased facilities for training in the particular branches of veterinary science. An inevitable sequel to this would be an increased measure of specialisation amongst the augmented teaching staffs of the colleges.

It is obvious that each of these centres must be provided with the necessary laboratory accommodation; this need not entail the erection of elaborate buildings, but there must be no more making do with sheds, shacks, disused cellars and unwanted attics.

Now the activities of these centres must be co-ordinated, and their activities correlated with the existing veterinary institutes, such as the colleges and research institutes. I submit that the most effective method of achieving this co-ordination would be for each veterinary investigation centre and each of the associated veterinary institutes to appoint one of their professional workers to a Board of Control. Each member would hold office for three years and would not be eligible for re-election until at least one year had elapsed after the expiry of his period of office. The Board would elect a Chairman and Honorary Secretary from its members, and it would have as an Administrative Secretary a civil servant, who should have a status equivalent to that of an Assistant Secretary. I venture to suggest that such a Board would be a very potent instrument for the furtherance of veterinary science, and it might well take over the functions of existing bodies, which at present direct research in veterinary science.

The activities of the veterinary investigation centres would undoubtedly bring an increased amount of work to the existing research institutes and the necessary steps would require to be taken to augment their facilities.

There remains the vital question of how all this is to be paid for. I am not one of those who believe that all these services should be provided for the farming community entirely from State funds. The initial capital expenditure might be provided by the State, but after that the service should be, at least in part, paid for by stockowners. I suggest that this could be easily done by a small levy on the prices realised at livestock sales and the sales of dairy produce and wool. This levy could be collected by the auctioneers, wool brokers and milk marketing boards. The principle involved has already been admitted in the system adopted by the milk marketing boards in the contributions made by them to assist research.

In conclusion, may I thank you for your support during my year of office, which I have enjoyed. I appreciate the honour and privilege of occupying the presidential chair of this Division.

ABSTRACTS

[A Method of Numbering and Marking Army Animals Adopted in the Central Mediterranean Force. Townsend, C. H. S. (1945.) *J. Roy. Army Vet. Corps.* **16**. 141-144.]

The routine British Army method of numbering horses by foot-brands and marking with a single broad arrow on the quarters has been found to be unsatisfactory for a number of reasons. The "Preston Branding Method" used by the U.S. Army has none of the objections of the British method. In the Preston method, the numbers are branded on the side of the neck parallel to, and one inch below, the edge of the mane. The American Army use the near side, and for distinguishing purposes the British Army have adopted the off side. The author states that the skin at this site is remarkably insensitive, and no great amount of restraint is required for the branding operation. Technical details of the method are given. Among the points in favour of the Preston method, which are cited, are: the mark is permanent; marking is originally done in the remount depots and, therefore, numerous sets of branding irons are not required to be carried by field units; markings and numbers are easily visible at all times.

N. J. S.

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[The Commercial Improvement of Swine Through Breeding. Willham, O. S. (1945.) *J. Amer. vet. med. Ass.* **106**. 36-38.]

The author discusses some of the general principles of livestock improvement with particular reference to the breeding of pigs. Improvement in the utility characters of pigs is most likely to follow from careful selection based on progeny testing. Where a particularly outstanding sire or dam has been secured, progressive improvement of the herd can best be obtained by linebreeding to this animal, so that its particular good qualities may be stabilised in the individuals comprising the herd. At times, for example, when an undesirable character becomes fixed in a linebred herd, an outcross may be necessary. Many commercial pig raisers prefer cross-breeding to pure breeding because of the hybrid vigour exhibited by the progeny, but the author emphasises that in order to produce good crossbreds for commercial purposes the breeder must first produce good purebreds of two different breeds. Breeding experiments are cited to show that the inter-breeding of different inbred lines within a single breed may also be adopted with some success in order to obtain progeny exhibiting hybrid vigour.

N. J. S.

Formed in 1878, the Suffolk Horse Society has had only four presidents in the 67 years: Lord Waveney, the Duke of Hamilton, Sir Cuthbert Quilter—up to 1911—since when the present Sir Cuthbert Quilter has filled the office, and he was recently re-elected. Membership is now nearly 2,000.

THE VETERINARY RECORD

June 23rd, 1945

NORTH OF IRELAND VETERINARY MEDICAL ASSOCIATION

THE recent banquet given in Belfast by this flourishing branch of our Association emphasised several salient points of more than evanescent importance, which are not without value to the constructively minded observer of veterinary politics.

Those who oversee the activities of this Association from its headquarters in London have, in the course of their duties, to travel the country and see for themselves the varying states of veterinary affairs. The opportunities thus given for comparison, and for constructive outlook in future developments, are of the highest value to the individuals concerned. It is important, as in the instance under review, that where conditions obtain which allow veterinary activities to flourish at their best, they should be described and discussed for wider edification.

From the point of view of successful and intimate government, Ulster has the advantage of compactness, and is, in fact, not larger than one of our greater English counties. Thus there comes about a close and happy relationship between the government and the governed. Each government department, housed, as most of them are, in the imposing parliamentary building at Stormont, can have, and does in fact have, easy and informal access to cognate departments. To anyone accustomed to the frigidly correct atmosphere of Whitehall, this Stormont atmosphere is most refreshing. To cross a passage and settle a knotty point over a cigarette, instead of interchanging tedious reports and minutes, makes for speed, efficiency and quick decisions.

All this is reflected in the happy efficiency of the State Veterinary Service in Northern Ireland. Embarrassed by the minimum of red tape and departmental formalities, there is a spirit among all its officers that must be reflected in their daily tasks with the agricultural community. There is equally close interlocking of the research side with the practitioners.

It would appear that we on this side of the Irish Sea have much to learn from this compact, energetic and hospitable country. Not least are we gratified by the generous manner in which the Prime Minister offered us, in the name of his government, hospitality, in the event of the Association holding a future Annual Congress at Belfast. He may rest assured his generous invitation will not be forgotten by the officers and executive of the N.V.M.A.

Weekly Wisdom

". . . A medical philosopher, who has so simply fixed his intellect on his own science as to have forgotten the existence of any other . . . will think himself free to give advice and to insist upon rules, which are quite insufferable. . . . It is not, I repeat, that he says what is untrue supposing man were an animal and nothing else: but he thinks that whatever is true in his own science is at once lawful in practice—as if there were not a number of rival sciences in the great circle of philosophy, as if there were not a number of conflicting views and objects in human nature to be taken into account and reconciled, or as if it were his duty to forget all but his own. . . ."—Cardinal Newman.

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The Lister Medal for 1945, which is awarded in recognition of distinguished contributions to surgical science, has been granted to Professor Sir Howard W. Florey, F.R.S., University of Oxford, for the outstanding importance to surgical science of his work on penicillin and its application. He will deliver the Lister Memorial Lecture later.

CLINICAL COMMUNICATION

Benzyl Benzoate in the Treatment of Sarcoptic Mange: A Warning

A. CORNISH-BOWDEN

Beckenham

I wish to place on record a recent experience I have had with benzyl benzoate emulsion in the treatment of sarcoptic mange.

I have used this method of treatment, with dogs, for more than two years with varying success, but without any untoward happenings until my last series of cases, from which I had two deaths.

Previously I had always used the emulsion supplied by one firm, but on account of short supply, defective delivery and the persuasions of a loquacious traveller, I tried the product of another firm and it was with this material that six dogs were dressed.

Fatal Case No. 1

Subject.—Welsh Corgi bitch; aged about ten years. This bitch appeared quite fit and well apart from her skin trouble, which was sarcoptic mange.

Symptoms.—Shortly after her arrival at the surgery, she was dressed all over with benzyl benzoate emulsion. Twelve hours later she was found trembling and went into clonic convulsions which were interrupted with tonic spasms. Prior to this the bitch had always been of a gentle disposition and was a great pet. She now appeared bad tempered, snapping at anyone or anything. She could not bear any part of the skin to be touched. If the coat were blown on, she would snap at the part and growl. All this suggested hypersensitivity. Two hours later the bitch became comatose and eventually died.

Post-mortem Examination.—This showed haemorrhages on the endocardium and bladder. The liver was enlarged and congested and the kidneys were engorged and friable. The meninges were congested, with a few petechial haemorrhages. The brain was hyperaemic.

Fatal Case No. 2

Subject.—Miniature Poodle bitch; aged about two years. This was a very healthy bitch. A great pet, showing practically no macroscopic lesions, but had the typical smell and had been an in contact for about ten days.

Symptoms.—These were very similar to those shown by case No. 1. There was trembling and muscular spasms, also clonic convulsions, etc., but the intense sensitivity was, to a great extent, absent. Coma and subsequent death set in rather more quickly than in case No. 1.

After some time I succeeded in making contact with the head of the Veterinary Department of the firm which supplied the emulsion. I had his assurance that the product was non-toxic. In spite of the fact that all this happened on VE day, I succeeded in finding an eminent chemist, the head of another firm. His verdict was to the effect that benzyl benzoate was entirely non-toxic. It may be that the vehicle in which the benzyl benzoate was suspended was responsible, or that the two dogs were unduly sensitive to the product. I am pleased to say that the other four dogs, one of them a Miniature Poodle, that were similarly treated showed no untoward symptoms.

I have heard from the makers of the emulsion that the base employed to carry the benzyl benzoate is trilthanolamine stearate.

REVIEW

["**Bovine Trichomoniasis,**" by Banner Bill Morgan, Parasitologist and Assistant Professor of Veterinary Science, University of Wisconsin. Burgess Publishing Co., 426, South Sixth Street, Minneapolis 15, Minn. (1944.) Price $3·25.]

This monograph consists of a review of world literature on Trichomoniasis, and of the clinical and laboratory research carried out by the author. In view of the extensive and most comprehensive list of references—all of which are detailed in a most excellent bibliography which will undoubtedly be greatly appreciated by all interested in this serious problem of bovine infertility—the work is most concise and readable.

The author accepts the consensus of present-day opinion regarding the more debatable problems of this disease, and his researches appear to have been directed to the substantiation of the work of others quoted.

He points out the need for more thorough clinical and laboratory research to elucidate problems as yet imperfectly understood and the economic importance of the disease to the livestock industry.

The chapters on serology and immunity are indicative of the immense research carried out in the preparation of this book, which will find its place in the library of all interested in Trichomoniasis.

North of Ireland V.M.A Annual Dinner

Ulster Government Leaders' Tributes to the Veterinary Profession

An event of much significance in the history of the veterinary profession in Ulster, representing as it does official recognition on the highest plane of the value of the work of the veterinarian, took place at the Grand Central Hotel, Belfast, on Thursday, April 26th, 1945, where the Annual Dinner of the North of Ireland Veterinary Medical Association (Division, N.V.M.A. of Great Britain and Ireland) was honoured by the presence of the Prime Minister of Northern Ireland, the Rt. Hon. Sir Basil Brooke, Bart.; the Minister of Agriculture, the Rt. Hon. Rev. R. Moore, M.P., and the Minister of Health, the Rt. Hon. Wm. Grant, M.P. Major R. C. G. Hancock, Acting President of the N.V.M.A., attended the function in the absence abroad of the President, Professor Wm. C. Miller, and the guests also included the Vice-Chancellor of Queen's University, Mr. D. Lindsay Keir, and Lord Justice Babington. Following is the list of other guests: Dr. G. S. Robertson (Permanent Secretary, Ministry of Agriculture); Mr. E. W. Scales, B.A. (Permanent Secretary, Ministry of Health); Mr. A. E. Swain (President of Ulster Farmers' Union); Mr. H. Jamieson (Secretary of Ulster Farmers' Union); Rt. Hon. Sir J. Milne Barbour, Bart., M.P. (President of Royal Ulster Agricultural Society); Mr. S. Clarke (Secretary of Royal Ulster Agricultural Society); Professor J. H. Biggart (Dean of Medical Faculty, Q.U.B.); Professor R. G. Baskett (Dean of the Faculty of Agriculture, Q.U.B.); Professor T. G. Browne (Principal of Veterinary College of Ireland); J. A. Flynn, Esq. (President of Veterinary Medical Association of Ireland); Professor J. J. O'Connor (Secretary of Veterinary Medical Association of Ireland); Miss D. Robertson (Limavady); Mr. J. O. Little (Chairman of Meat Traders' Association); Mr. J. Keatinge (Secretary, Amalgamated Transport and General Workers' Union); Mr. J. D. Whitty (Chief Veterinary Officer, Eire); Mr. D. A. E. Harkness (Senior Assistant Secretary, Ministry of Agriculture); Dr. Freith, F.R.S.

Following the honouring of the Loyal Toasts, Mr. A. McLean, proposing the toast of the "Government of Northern Ireland," said that when a veterinary surgeon was "called on," it was usually to give advice, but he hastened to say to the Prime Minister, whose name he had the honour to couple with the toast, that he did not rise in the capacity of adviser. (Laughter.) They, as a profession, could not prescribe for those who "sit in the seats of the mighty"—their domain was on a much lower level, and of all the supposed disorders of the Government, it had never been suggested that they suffered from any of the diseases which were their special care!

They were, however, very interested in the actions of the Government where they affected the basic industry of the province—agriculture. All intervention by the State in the affairs of the farmer was with the object of improving his own economic position and the conditions of the industry in general. It could be said that, in this sphere, the Government had a partner in the veterinary profession. In helping the farmer, the profession could give advice; they could prescribe; they could take actions—perhaps comparatively limited in their scope. They could offer to him the most recent advance of science in the veterinary sphere, but in the last resort the well-being of the farmer's stock depended upon himself.

The Ministry of Agriculture had placed an unrivalled service of information at the disposal of the farmers of Northern Ireland. He made bold to say that the Government could take a firm stand on its agricultural policy alone. That was not to say that the Government had produced an agricultural "Utopia" in Northern Ireland, but within the limits of human endeavour and economic possibilities, it had certainly made a "brave show," to use an Ulsterism in its highest sense.

Under the Agricultural Produce Meat Regulations (N.I.), 1930, and the Milk Products Act (N.I.), 1934, the veterinary profession had been given its rightful place in the inspection of the country's food supplies of animal origin, and they were most grateful. It was their sincere hope that these tasks had been carried out in a manner befitting to the country and with honour to the profession.

They were deeply appreciative of the opportunity afforded for the investigation into animal diseases at the Ministry's laboratory, Stormont, and might he express the hope—perhaps needlessly—that the interest in this aspect of veterinary science be increased.

That was not the first occasion on which the Prime Minister had honoured the veterinary profession. They all had the most pleasant recollections of the hospitality which was extended to them by the Government of Northern Ireland on the occasion of the visit of their parent body, the National Veterinary Medical Association, to Belfast in 1935, and at which the Prime Minister, as Minister of Agriculture, proposed the toast of "The Veterinary Profession." It was with sincere regret that they learned that the name of yet another of the Prime Minister's sons had been added to the long list of Ulstermen who had made the supreme sacrifice. On behalf of the veterinary profession he extended to Sir Basil and Lady Brooke their deepest sympathy in that grievous loss.

The Prime Minister (Rt. Hon. Sir Basil Brooke), in response, said that he thought it was rather a nice gesture to ask Mr. McLean to move the toast: it showed a closer approach and co-operation with the Government. He thanked Mr. McLean for his very nice remarks. He always felt that when he was talking to technical experts like themselves it was rather difficult and it rather cramped one's style, but he always thought—and those of them who were associated with him when he was Minister of Agriculture instead of Prime Minister knew that the worries were of a different type—that their service and the work which they did for the community always filled him with the very greatest interest and admiration. They—that was to say the Veterinary Officers who were part of the Ministry—could pat themselves on the back in that they had led the way for a State Veterinary Service. In addition to that, they had had wonderful co-operation right through with those who might be described as the private enterprise team. The two worked as brothers and did a magnificent job. They had very difficult problems to solve, especially since the war, and he thought that one of the most outstanding examples of skill was the extraordinary ability with which the Veterinary Officers of the Ministry were able to judge to a very close figure the killing-out weight of the various animals which they had to deal with. As soon as the farmers realised the skill which was shown in the estimation, and the fairness which was shown in the treatment of their cattle, he very much doubted if any farmer would ever go back to the old methods.

What they had to realise in this country was that agriculture was of the very highest importance. If one thought what a happy and contented countryside meant—it meant a tremendous amount to the country. What every Government must aim at was to have a countryside happy, contented and healthy and with an interest in life, where the farmer was his own boss and could look after his own affairs. "You gentlemen come into very close contact with those men," continued the Prime Minister. "There is one aspect which is perhaps not fully realised, and which, I believe, has a great deal of truth in it—if you have a healthy stock and healthy land you will have healthy people. And I believe that you can trace quite a lot of diseases to which human beings are heir, to land which is unhealthy and which produces unhealthy stock and unhealthy crops, these being eventually fed to animals which, in consequence, suffer from diseases. So you, gentlemen, are really one of the links in the battle which any Government must pursue—the battle of better health for the country; and when you have better health you will have greater happiness and better prosperity all round.

"I have a very pleasant memory of the conference which you had some years ago and I think I would not be far wrong—the Minister of Finance is, of course, responsible for these things—in assuring you that the Government purse will be long enough to give you the first conference when peace is proclaimed, and if you invite me, there will be nothing which would give me greater pleasure than to come along and see you again. (Applause.) So I wish you all the best and offer congratulations on the work you have done, with the hope that the conference will not be long delayed. (Loud applause.)

"The Ministry of Agriculture"

Mr. H. D. Gilmore, submitting the above toast, said the fact that there were over 100 members of the veterinary profession employed by the Ministry of Agriculture spoke volumes for their appreciation of the services the profession could render to the agricultural industry. It was at the moment the most intensive veterinary service in the British Isles and possibly in Europe. The Ministry's trust in the profession as combined technical and administration officers was exemplified in the operation of the Livestock and Meat Control Order on behalf of the Ministry of Food. Thus, the scope of the profession's activities had been widened by the Ministry recognising the special capabilities of their members to tackle all aspects of food production of animal origin.

Whilst the tendency had been towards State employment, the Ministry, when they imperilled the livelihood of part-time inspectors, offered the choice of absorption or compensation. That was what occurred ten years ago. The provision of a research laboratory by the Ministry had been of great assistance to veterinary practitioners in that area; so much so, that their only grievance was that the process of expansion had to be temporarily delayed on account of the war. The livestock industry in Northern Ireland had much to thank the Ministry for because of the work—the pioneer work—of Dr. Lamont and his staff at the Research Division.

There was in their profession a growing tendency to develop as agricultural scientists with special relation to animal husbandry and preventive medicine rather than as practitioners of curative medicine, and there was every indication that the Ministry of Agriculture appreciated their possibilities in that role and would give the profession all the encouragement and opportunity needed.

Personally, he had constantly championed the Ministry in every scheme they had launched for veterinary reform. He felt that his espousal had been vindicated and, notwithstanding rumour, he was confident that no action of the Ministry would lead to a violent contradiction of his hopes in the future.

The Minister of Agriculture (Rt. Hon. the Rev. Robert Moore), replying, said that he took it as a very good compliment to the Ministry of Agriculture, that that particular profession should have seen good to honour such a toast in the way they had done, because, as the mover pointed out, they were, as a Ministry, very much the largest employer of their profession there was in Northern Ireland, and it was not always the case that the employee thought so much or so well and spoke so highly of the employer as they had chosen to do that evening. (Applause.) In regard to the Ministry, he hardly new what to say. They all understood the general set-up of it pretty well. They knew that during the war they had become, not a Ministry in the old-established sense of that word, but a kind of glorified trading concern. They had got to the point where in respect of nearly everything the farmer had to sell and grow, and of many of the things he had to purchase, he must either transact that business directly through his (the speaker's) Ministry or he must get a permit or licence from the Ministry before he could do it. As a matter of fact, he believed that in the preceding year the Ministry handled nearly £40,000,000 of public money. Now he was living in the hope that the day was not far distant when they would be able to underline that word "Ministry" with more of its original sense, and that it would take up the educative and helpful function which it was created to perform.

Whether the duties that their profession had been fulfilling in the way of inspecting and certifying and, so to speak, standardising the products of the farms, would be continued under some other auspices, he did not know. He did not know exactly what the new set-up of these things was going to be. As the Prime Minister had said, he thought they could claim that in spite of the grumbling—he would get immediately perturbed if the grumbling ceased —(Laughter)—they had done, and the Ministry had done, a very satisfactory job of work in that connection. He believed that in spite of all the agitation for the removal of controls, and to get back to absolute and unfettered freedom, some of the machinery that had been in use, and which had so justified its use and existence during the war period, would probably be wanted after the war, too. Nevertheless, he rather looked on their profession—and, indeed, as the proper function of his own Ministry—from the educative and preventive aspect. "Whatever may be the future of agriculture—and one can see great difficulties ahead of us—I don't think there is any need for gloom or undue depression, but whatever the future of agriculture may be in these islands, I think it will be based on efficiency," continued the Minister. "No industry that is inefficient will be tolerated for very long after peace has come. In spite of the good things and the touching things that have been said from time to time about the service which agriculture has rendered to the nation during hostilities, I think it will not be able to escape from that demand of general efficiency on the part of those engaged in it, and I think that is where you will come in as a profession more and more. You know, better than I do, the vast strides which have been made in research, and I feel that that tendency will go on after the war. You are only on the fringe as I see it as to what your profession has in it to render in the way of service and from the educational point of view, and from the point of view of efficiency on the farm. Whatever other classes of the community may suffer from unemployment there is not very much risk of your profession suffering in that way. I would compliment you, particularly those in the employment of the Ministry, on the tactful understanding kind of way that you have carried out your duties. Our people in the North of Ireland are the decentest people imaginable, but they are touchy. (Laughter.) They need to be wisely and carefully handled. They are not like the Germans—you can't browbeat them, and I, sooner or later, as Minister, got to know what the general trend of feeling in all the different sections of the Ministry's work was, and what the feeling of the farming community was towards it, and I know from the comparative scarcity of complaints that have come to me, that you must have done your work and carried out your duty in a tactful and understanding way, and perhaps that is one of the greatest assets that any Government department or any Ministry could have. You will see the need for continuing in that line. If you just take, for example, this new scheme which was arranged for the preventive treatment of abortion, we as a Ministry offered to treat young female cattle free of all charge, and we asked farmers to apply, and so far as I know—I do not know the very latest figure —they have not been just tumbling over one another in their applications. (Laughter.) Whether it is because we propose to do it free of charge I do not know. They possibly suspect some snag, but the fact remains, and it is a very good illustration, to my mind, of the way you have got to take our people and to get round or break down their suspicions and secure their confidence. They are a bit slow to change. You cannot dragoon them. You have got to expose them to ideas—give them a little time and they will respond.

"I do wish to thank you as a profession for all the help you have given to the industry, not only those of you connected with the Ministry but those who are practising on their own, and I have just learned that the whole arrangement of things in Northern Ireland is more or less envied by some other people. I won't say who they are. I thank you very much for inviting me here. It is the first time I have been at one of your functions, and I feel very much at home in a gathering of this kind. I think the Prime Minister and I see eye to eye and feel heart to heart about the Ministry of Agriculture. It is one Ministry that he and I are very deeply interested in personally. I, like the Prime Minister, wish you all success in your profession. I think we can claim that from the research point of view we are in the very van of things. I hope that you and the professional men will continue to keep in the closest possible touch with what is being done by our research men. I personally hope that before very long we shall be able to strengthen our team, and that we shall be able to get more funds devoted to further research work."

The Minister concluded by saying that there was plenty of scope in regard to cattle production, milk and poultry diseases, and all the animals on the farm. He did not think they need be afraid that they would be professionally unemployed. He wished them all possible success. (Loud applause.)

"The Vete inary Profession"

The above toast was in the capable hands of Miss D. Robertson, a lady farmer, of Limavady, who submitted it "to the continuing good health, increasing prosperity and soaring standards of the veterinary profession." As a farmer, she had found herself forced to be, if not a vet. herself, yet at least to be "knowledgeable" about animals. She had also found herself forced to take an intelligent interest in medicine, in botany and in biology, not to mention science as in soil chemistry, etc., etc. She owned, therefore, to having somewhat emphatic views about the part all these sciences had to play in good agricultural practice. To her mind, progress and success in farming were absolutely bound up with the development and improvement of all veterinary science and practice. (Applause.)

Veterinary science, as such had, she believed, only had an official existence since 1844 when a Royal Charter was granted to the London and Edinburgh Colleges. The art of healing sick animals, however, was probably as old as humanity itself. Nevertheless, it was interesting to note that the recent impetus towards higher standards of veterinary work had come in very considerable measure from the increasing recognition that a sound human hygiene and public health depended on a sound animal hygiene and farm health—not to mention clean crops, etc. They had only to think of the history of human tuberculosis and of the struggle still being waged over bovine tubercle; of infected pork carrying trichinosis and, where crops were concerned, of ergot gangrene. Medicine was turning its attention more and more to prevention rather than cure, to dietetics rather than drugs, and at the end of these trails found itself staring incredulously at the farmer more or less supported by the local vet.

Veterinary and medical science and the art of farming had, therefore, to get down to the job of reciprocally co-ordinating and increasing their knowledge each of the other, in friendly co-operation as fellow-guardians of the national health and well-being. The triangle so formed was interdependent and indissoluble. To her mind its functional success was the basis of any guarantee of a truly vital civilisation in our modern world. It seemed to her absolutely essential that veterinary science and practice should be able to work shoulder to shoulder with other sciences, using equal standards of efficiency, skill and accuracy.

Continuing, Miss Robertson asked, why should not Belfast have a veterinary faculty or department at Queen's where Ulster and other students could qualify and thus supply the province with sufficient men who, as well as their university training, possessed that home-bred feeling for local conditions and local prejudices that was so valuable? Even diseases took on distinctive local variations to which Ulster-bred students should be more sensitive, and of which they should be more fully aware, than extra-provincial men. They were told that the province was to become

more and more intensively agricultural, and they would need a vastly greater number of well-trained veterinary surgeons than ever before if that excellent goal was to be attained. A veterinary school at Queen's would increase the value to the community of that institution, widen its sphere and influence and help in turn to increase the prosperity of Ulster.

They had already in existence an excellent and progressive Research Division established at Stormont, which had a long list of important achievements in the battle with animal diseases to its credit. She, as a practical farmer, could not speak too highly of the co-operation and assistance she had received in her troubles from the Division. The research station, being already well established, should enormously facilitate the equipment of a university faculty for veterinary science and form an invaluable extra-mural school.

Major R. C. G. Hancock, Acting President of the N.V.M.A., responding to the toast, said that he was delighted when he heard that, as the next senior member among the officers of the Association, the wish was expressed that he should go over there. He had very lively memories of that most delightful Congress they had in 1935. They never had such a Congress. It was a fine experience, and by a strange coincidence it was his first Congress. He remembered being overwhelmed by their kindness and generosity and the regal entertainment they gave them. When he heard the Prime Minister expressing a hope that there might be another Congress over there, he thought "What news to take to Gordon Square—good news—that you are not unwilling to receive us again." (Applause.) When the next post-war Congress came up for discussion at Gordon Square he knew the expression would be, "It will have to be at Belfast."

He took it that as Senior Vice-President and Acting President, he should let them know how greatly the Association was flourishing at the moment. They had been through great difficulties in the war years, but he thought they could claim that they had preserved a fighting front. There was a time, within his memory, when he was first initiated into the mysteries of the Association's activities, when they rather tended to receive the Ministries and their bodies as a *fait accompli* and had to be thankful for those mercies that were doled out to them, but it was not unknown in these days, he was glad to say, for Ministries to tremble at their approach. (Laughter.) They sometimes even came to them—(Laughter)—at Gordon Square, and said, "How would you feel if we started so and so?" That, he thought, showed that healthy aggression was not a bad thing when dealing with Government departments. (Laughter.)

He had something to take back, however. He had heard a lot about their activities in that part of the world; in fact, he had not been long in their company before he became aware how far behind they on the other side were in certain aspects of their veterinary activities compared with them in Northern Ireland. He might put it that it was a case of "what Northern Ireland does to-day London thinks about to-morrow." (Laughter.) He frankly confessed that they would have to do a bit more gingering up from Gordon Square if they were to compete with the remarkable activities, great forethought and drive that they showed over there. He thought it was in 1939-40 that the National Veterinary Medical Association started its fighting front and presented the Ministry of Agriculture with a scheme all drawn up and ready to digest. After two years they thought they would let the N.V.M.A. have a shot at it, and that was the genesis of the four cattle diseases control scheme which was well known to them. They had a great many problems yet to solve. In Northern Ireland they had a youthfulness and a vitality and a remarkable degree of co-operation between the officers in the various branches of the State Veterinary Service and those high in the Government departments: it was a spirit which they could not but envy.

Major Hancock concluded by expressing his gratitude for the delightful hospitality which had been shown him from the moment he landed.

Professor Browne, of the Veterinary College of Ireland, Dublin, supported Major Hancock in his response to the toast. He should like, first of all, on behalf of the guests from Dublin, to thank the Veterinary Medical Association of Northern Ireland for inviting them to that function to-night. "Whatever the political division of this country may be," said Professor Browne, "science—particularly veterinary and medical science—knows no boundary for those living things which cause disease have no respect for politicians or armies or air forces or any other forces, except the work of the scientist. We are here up against a common enemy, and in any eradication scheme in this country it will be necessary for the veterinary scientists on both sides of the border to co-operate and work hand in hand along similar lines if the eradication schemes in this country are to be a success for the country as a whole. We in the twenty-six counties have always looked with admiration to the veterinary services in Northern Ireland. We have watched their growth and development almost from infancy with admiration, and we are particularly interested since so many of our Dublin graduates have played such a large part, and are still playing such a large part, in the process." The Royal College of Veterinary Surgeons, which was their parent body, was now just 101 years old, having celebrated its centenary last year. He thought they must admit that *en route* the veterinary profession had gone from strength to strength.

They were a small profession and perhaps would always be a small profession compared with others, but in their importance to the community and particularly to the farming community they bowed to no others in the land. It was a case of a great deal being done for a great number by a few. The profession was an important factor in building a country, particularly a new country: those of them who visited the Glasgow Exhibition and paid a visit to the South African Pavilion would have seen standing at one end of that pavilion, on a pedestal, the bust of a man who was recognised as being more instrumental than any other in building South Africa. He was not a politician nor was he a soldier—he was a veterinary surgeon of Swiss nationality. In this work he had the assistance of several Dublin graduates and the name of one would be dear to some of them.

As Miss Robertson had said, they were changing over from the curative to the preventive side and a significant change was made by the British Minister of Agriculture a few years ago when they changed the name of the Animal Health Division to the Animal Diseases Division: the energies of the profession were being more and more directed towards the prevention of disease. Perhaps the greatest handicap the profession was up against to-day regarding diseases in animals was apathy on the part of the stockowner, who seemed to accept the annual loss from disease, however great it might be, as a work of God. He had not the education and foresight to take the long view; he would not participate in anything unless he could see some immediate advantage. Our first step was to educate the stockowner by helping him to reduce his losses through producing professional men with the necessary knowledge. What the profession required in the main was co-operation from the community. The words of a well-known Statesman were appropriate: "Give us the tools and we shall finish the job." (Applause.)

"Queen's"

Mr. J. McAllan, proposing the above toast, said that on such a unique occasion as that in the history of their profession, it would be very unfitting—indeed almost unseemly—if they dispersed without doing honour to an institution which had such a high place in the agricultural life of this country, and which was so very much interested and concerned in its well-being. "Queen's" had certainly done magnificent work in Northern Ireland, and her fame had spread to all the countries of the earth. While she was best known as a medical school, the faculty of Agriculture at Queen's had a body of most excellent workers; not only had they done great work for Northern Ireland, but they had been of great benefit to the various agricultural activities all over the world. All must feel gratification at the very close union that was being formed between the University and the Ministry in the development of agricultural activities in the Province. Queen's had always been very fortunate in its vice-chancellors, but he could say, without fear of contradiction, that it had never been more fortunate than in the present incumbent. Mr. Lindsay Keir had tremendous enthusiasm for the Young Farmers' Clubs, and that enthusiasm would have an effect on the country.

Coupled with that toast was the name of Professor Biggart, whose renown as a teacher and examiner in medicine was very high indeed. Professor Biggart realised how valuable veterinary research could be to him in his own research work at Queen's and he had always worked in the closest harmony with their colleagues who were engaged in veterinary research in Northern Ireland.

Mr. D. Lindsay Keir, Vice-Chancellor of Queen's University, responding, returned thanks for the kind way in which they had accepted the toast to the University of which he had the honour to be the head. That was the 108th occasion upon which he had responded to the toast of Queen's!

The very title of their Association—the Veterinary Medical Association—seemed to point, in a most happy way, to that unity of purpose between the different branches of study which it was their mission to create and foster. He liked to think that between Professor Biggart and Dr. Lamont there was a sort of two-way traffic. "From our point of view and from your point of view," the Vice-Chancellor proceeded, "I would say that the greater and closer the flow of ideas the better it will be for university studies generally, and for your veterinary studies in particular. I like to think of the partnership between the University and the Government which, I think, is unique in these islands. We have good reason for appreciation of the partnership between us and

the Government of Northern Ireland, and it seems to me to be more marked in the arrangements which exist in the Faculty of Agriculture. Our association with veterinary science exists in a first-rate department of veterinary studies at Stormont. If the agricultural industry stands in need and we at Queen's can be of any help and are asked, we shall do whatever we can. We have good reason to be proud of the progress which has been achieved in this Province in the application of first-rate science and research to the perplexing problems of the farm. Nowhere else in the world is there a parallel to what we have here."

Professor J. H. Biggart, who also responded, expressed his appreciation of the opportunity of joining with the members of what they in the medical profession regarded as their sister profession. It was good to know the approbation with which they regarded the Minister, and the approbation with which he regarded them. He had dined with the Minister who was responsible for the medical profession and he did not think he approved of them, on the whole, as the Minister of Agriculture seemed to approve of the veterinary profession. (Laughter.)

One rejoiced to think that the Government had set up research stations manned by such enthusiasts as Dr. Lamont and Mr. Kerr, who came into contact with them: an association from which the University derived great advantage. They of the medical profession were only too willing and only too complimented to combine with the veterinary profession in endeavouring to find the cause of diseases and the cure: he hoped the fresh acquisition of penicillin would become available for the treatment of animal diseases.

The toast of "The Ulster Farmer" was proposed by Mr. R. W. Cassells, and responded to by Mr. Sam Clarke. That of "The Press" was proposed by Dr. Lamont, and responded to by Mr. W. D. Morrow.

QUESTIONS IN PARLIAMENT

Requisitioned Horses (Re-purchase)

Major Kimball asked the Secretary of State for War whether the owners of horses which were requisitioned for the Army in the early months of the war can now be allowed to re-purchase those horses; and at what reduction from the requisitioning price.

Sir J. Grigg: Provided the horses are in this country they will be put up to auction when they become surplus. Arrangements have been made to give notice of the sale to those who have asked to be given an opportunity of buying specific horses.

Major Kimball: Does my right hon. Friend think it is fair to the owners of these horses which were requisitioned that they should now only be given the chance of getting them back at a public auction, where they will have to bid for what is their own, and will not be allowed to buy them back at the prices at which they were requisitioned?

Sir J. Grigg: I should have thought that the arrangement I mentioned was a reasonably fair one, but I will certainly consider whether it is possible to make arrangements which are more favourable to those who originally gave up the horses.

OCCUPATIONAL ALLERGY AMONG VETERINARIANS

The *Jen-Sal Journal*, in its first issue of the year, made reference to the large number of veterinarians who suffer from vesico-pustular dermatitis of the hands and arms which is characterised by exacerbation and remissions corresponding to their exposure (contact) with certain foreign substances such as body tissues and fluids of animals, vaccines, bacterins, antitoxins, fungi, and chemical agents, including harsh soap, employed in the pursuit of their daily work. The trouble is chronic and difficult to overcome. It is manifested by rash, pruritus, multiple vesication and pustulation of the hands and arms, seldom of any other part of the body. Exposure to the vaginal discharges of cows infected with brucellosis is one of the more common causes. The dermatitis is so severe and persistent that not a few veterinarians have had to discontinue practising at frequent intervals or entirely. A survey revealed that approximately 20 per cent. of all American veterinary practitioners suffer to some extent from allergic dermatitis of the hands and/or arms. The type caused by vaginal discharges of cows can be prevented and favourably modified by the use of a high titre Brucella antiserum (Huddleson). Considerable benefit is also derived by taking daily doses of sodium bicarbonate and calcium lactate but the main remedy is to avoid hand washing that tends to damage or destroy the cutaneous epithelium of the hands.

NOTES AND NEWS

The Editor will be glad to receive items of professional interest for inclusion in these columns.

Diary of Events

June 25th.—Meeting of the Farmers' Club, Kingsway Hall, Kingsway, London, W.C.1, 2.45 p.m.

June 27th.—N.V.M.A. Committee Meetings in Edinburgh: Sub-committee on First Aid Handbook, 10.30 a.m.; Organising, 12 noon; Appointments, 2 p.m.; Finance and General Purposes, 3 p.m.

June 28th.—N.V.M.A. Meetings in Edinburgh: Joint Parliamentary and Veterinary Officers and Public Health Committee, 10.30 a.m.; **Council Meeting**, 11.30 a.m.

June 28th.—R.C.V.S. Written Examinations.

June 29th.—R.C.V.S. Written Examinations.

June 29th and 30th.—Meeting of the Pathological Society of Great Britain and Ireland, at Cardiff (Dept. of Pathology, Welsh School of National Medicine). Particulars on application to Mr. J. H. Dible, Department of Pathology, British Post-graduate Medical School, Du Cane Road, London, W.12.

July 2nd.—R.C.V.S. Oral Examinations begin.

July 4th.—Meeting of the Western Counties Division, N.V.M.A., at Exeter (Room 28, University College of the South-West, Gandy Street), 2 p.m.

July 17th.—Meeting of the British Society of Animal Production at the University of Reading, 10.30 a.m.

July 24th.—Summer Meeting of the Eastern Counties Division, N.V.M.A., at Cambridge (Institute of Animal Pathology), 11 a.m.

July 26th.—Meeting of the South-Eastern Division, N.V.M.A., at Folkestone (Subscription Rooms, Leas Cliff Hall).

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Scheme for the Control of Certain Diseases of Dairy Cattle in England and Wales

The Executive of the National Veterinary Medical Association, after agreement with National Farmers' Union and the Ministry of Agriculture, recommends that undertakings under the Scheme for the Control of Certain Diseases of Dairy Cattle in England and Wales, which are due to lapse and which both parties are willing to renew on the basis of existing agreements, should be extended for twelve months.

This would mean that in respect of two or three year undertakings, the 10 per cent. and 20 per cent. rebates respectively will continue to operate.

Meanwhile, discussions between the three bodies concerned will take place and any alterations which may subsequently be agreed will be announced.

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THE BIRTHDAY HONOURS

Mr. R. Glave-Saunders Receives the C.B.E.

Members of the veterinary profession, more especially his colleagues in the West Country, will wish us to express to Mr. Rowland Glave-Saunders, M.R.C.V.S., of Exeter, heartiest congratulations on the high distinction conferred upon him by His Majesty the King in the award, announced in the recently issued Birthday Honours List, of Commander of the Most Excellent Order of the British Empire. Throughout the war Mr. Glave-Saunders has shouldered the responsibility of the chairmanship of the Exeter War Emergency Committee, and primarily it is this outstanding service that has thus been recognised. As is well known amongst us, however, Mr. Glave-Saunders has also to his credit a remarkable career in municipal life, of which the citizens of Exeter have shown their appreciation by electing him as mayor for a record number of successive years. In both these spheres of activity our colleague has had the whole-hearted support of Mrs. Glave-Saunders, whose depot has been a feature of the city's war-time activities. Despite the calls of the many aspects of public life with which he has so closely identified himself, Mr. Glave-Saunders has been a consistently active member of the Western Counties Division, N.V.M.A., of which he has now been president for a considerable period.

Our readers also will welcome the recognition accorded Sir Frank Stockdale's beneficent labours in, amongst other colonial enterprises, the field of animal economy improvement. Sir Frank, who was formerly Comptroller of Development and Welfare, West Indies, and who now officiates as Development Adviser to the Secretary of State for the Colonies, receives the G.C.M.G.

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PERSONAL

Birth.—Holmes.—On May 20th, 1945, at Port Shepstone, Natal, South Africa, to Pat (*née Tregilgas*), wife of Capt. C. R. Holmes, R.A.V.C., a sister to Lesley Anne.

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R.C.V.S. OBITUARY

The Late Mr. Henry H. Worrow, M.R.C.V.S.

An Appreciation

Fate has been particularly unkind during the last few months in its attacks on that ever-diminishing band, the horse practitioners of London. For many decades the London practitioner was looked upon as in the highest rank of his profession. There was as great a hiatus between him and the country "cow leech" as between Harley Street and the rural "sawbones." This was a difference not only in professional status and influence but also one in which the relative remunerative rewards did not bear comparison.

Who amongst us can avoid being sad when we cast our minds back only a few years and see those busy yards where there was much coming and going of men and horses, blazing forge fires and the music of the anvil? And the principals—men dressed for the part, good organisers, efficient at their job, men who lived well, enjoyed every minute of their lives, and by their work earned and indeed almost compelled the respect of their fellows and clients.

Lately we have lost Herbert King and William Samuel King; typical men of the horse age, yet in their individuality as the poles apart. Both forthright men, proud of their competence and afraid of no one. Men who would speak their mind without fear or favour and sometimes as a consequence might annoy, but that annoyance would not lose a friendship.

In your issue of June 9th, the death of yet another worthy, Henry Huckle Worrow is recorded. Now this man was of a different temperament. He was of a retiring and almost shy nature, one who never hit the high lights of publicity. He came of a very old veterinary family which, originating as farriers, had been settled in the Wapping-Shadwell district since that populous part had been a Thameside village. This family saw the rise and fall of London horse practice. Mr. Worrow qualified in 1896 and joined his father and uncle in the family business. In 1909 he became the principal, succeeding to a large practice and by his ability adding to it.

In his own quiet way he became an authority on all matters appertaining to the horse. In his forge there were three fires and nine men constantly at work, and it gladdened the eye to see the industry and activity at his premises. He specialised in the troubles of the horse's foot, being one of the few who could really cure canker. He had a large contract practice and his clients were loyal—one contract had been placed with his family for over 100 years.

Mr. Worrow retired about ten years ago to the quietude of Essex, and we rarely saw him again; but he has left a memory of a quiet, courteous and competent English gentleman which will live long in Wapping and the East End.

J. McC.

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GENERAL OBITUARY

Mr. W. G. T. Blois, O.B.E.

The National Federation of Meat Traders has suffered a great loss in the death, which took place suddenly on June 13th, of its general secretary, Mr. William G. T. Blois, O.B.E. Mr. Blois, who succeeded to the secretaryship on the retirement of Mr. Payne in 1924, had a gift of exposition of the complicated Acts and Regulations affecting the members of his great organisation which rendered his services of special value during the war years. In 1938, when the Government set up its Food Defence Plans Department, he took part with the leaders of the Federation in the preparations for the present system of control for the meat trade. On the outbreak of war the Ministry of Food sought his services, and he was seconded to the Meat and Livestock Division as Deputy Chief Meat Agent until the growing work of the Federation, coupled with staff call-up, necessitated his return.

Mr. Blois developed a close connection with the Lobby of the House of Commons and an intimate knowledge of the working of Parliament, which perhaps reached its culmination when the Meat Traders' Sunday Closing Bill (which he drafted and guided through its various stages in both Houses of Parliament—with the necessary assistance of Members of each House) was placed on the Statute Book. In 1930, in recognition of his services as secretary to the Commercial Pig Committee, which subsequently became the Pig Industry Council, he was made a Member of the Order of the British Empire, and in 1938 he was further honoured by being made an officer of the Order.

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NATIONAL AIR-RAID PRECAUTIONS FOR ANIMALS COMMITTEE

As it has now been ascertained that neither postal authorities nor railway companies, nor carriers, will accept packages or goods "carriage forward," members of the profession should return N.A.R.P.A.C. equipment "carriage paid" and forward the receipt for refund to: The Secretary, N.A.R.P.A.C., Byfeld Hall, Byfeld Gardens Barnes, London, S.W.13.

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COUNCIL OF AGRICULTURE AND VETERINARY SERVICE

At the recently held meeting of the Council of Agriculture for England a resolution urging the establishment of a free State veterinary service was referred to the Standing Committee.

Mr. J. Alpass (Glos.), who moved the resolution, said there were only 10 per cent. of the country's dairy cattle being treated under the voluntary panel scheme. In view of the prevalence of disease among dairy cattle and the consequent adverse effect on the production and quality of milk, he hoped they would urge the Government to adopt the recommendations of the Loveday Report. He was aware of the shortage of veterinary surgeons, but the Loveday Report suggested a remedy for that by an increase in the number of graduates and by proposals that veterinary study should be given full university status. A free State veterinary service, he suggested, would be one of the finest and most remunerative investments the country could embark upon.

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ADDRESSES OF DISEASE-INFECTED PREMISES

Foot-and-Mouth Disease:

Norfolk.—The Homestead, Wortham, Diss (June 13th).

Swine Fever:

Cumberland.—Windmill, Silloth, Carlisle (June 12th); Havrigg, Silloth, Carlisle; Haggistone Holme, Longtown, Carlisle (June 14th); Southerfell, Troutbeck, Penrith (June 15th).

Devonshire.—Pennsylvania Farm, Axminster (June 16th).

Lincs.—40, Pickworth Road, Great Casterton, Stamford (June 12th).

Norfolk.—The Homestead, Wortham, Diss (June 13th).

Northants.—Hall Farm, Spratton, Northampton (June 12th); 3, Great North Road, Thornhaugh, Peterborough (June 13th).

Notts.—Railway Arches Cromford Street, Nottingham (June 14th).

Wilts.—Elcombe House Farm, Wroughton, Swindon (June 12th); Penleigh Farm, Westbury (June 16th).

Yorks.—Pearson's Yard, High Street, Northallerton (June 15th); 57, Blacker Road, Mapperwell, Barnsley (June 16th).

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WINTER MILK SUPPLIES: A GRATIFYING INCREASE

The following information furnished by the Ministry of Agriculture, at a recent Press conference, relative to the increase in the nation's supplies of winter milk, is worthy of record in our columns as representing a notable achievement for which much credit is due both to the producers and to their veterinary advisers on herd management and the control of disease in dairy cattle.

The Milk Production Campaign in England and Wales was organised in the winter of 1941-42 when supplies of milk were falling below the pre-war level. We have now passed through the fourth winter of the Campaign and it is gratifying to report that the dairy farmers in England and Wales have not only recovered the deficit but have increased the pre-war supply by a further substantial quantity.

Throughout this effort to increase supplies of milk in war-time, emphasis has been laid continuously on the importance of an adequate winter supply—an increase in winter output is almost a guarantee of greater annual production. The War Agricultural Executive Committees and the dairy farmers all over the country have been urged to concentrate on output in the winter months. This has been a difficult process in some areas, particularly in the West where summer milk production was the main enterprise before the war. To turn over to winter production on these holdings is a slow process, but the evidence this winter has shown clearly that great strides have been taken even in these areas to calve a greater number of cows and heifers in the autumn. The fact that milk

supplies increased again this last winter also proves conclusively that much has been done on dairy farms everywhere to raise the output from the arable land of feeding-stuffs for the cows.

Conditions of production of milk this last winter were not favourable. Throughout the whole country the weather was against farmers until the end of January. Home-grown feeding-stuffs, particularly hay, were also short and there were serious deficiencies in some areas. With average conditions undoubtedly the increase in output of milk would have been appreciably greater. The increased concentration on autumn calving of cows and heifers, however, gave us a substantial increase in spite of these adverse factors.

The progress made in winter milk production is seen by comparing the output this last winter with the figures for 1941-42.

	Million gallons
Winter output 1941-42	461
" " 1944-45	535

Increase 16 per cent.

The supply in 1944-45 was considerably greater than in the pre-war years.

Dairy farmers in England and Wales can claim that they have made available 74 million gallons of additional milk this last winter compared with three years ago. This is equal to 2·8 millions per week in the winter—most of which has been distributed to meet the increasing claims of the priority classes. The British dairy farmers and their workers have by their stupendous efforts in production enabled the population to consume more liquid milk in war-time than ever before, and quantities have increased as the war years pass.

These increased supplies have come from all parts of the country: the following figures show the percentage increase in the Milk Marketing Board regions comparing last winter with 1941-42:—

Region	*Percentage increase winter milk 1944-45 over 1941-42*
1. Northern	26
2. North-Western	16
3. Eastern	12
4. East Midland	16
5. West Midland	20
6. North Wales	38
7. South Wales	22
8. Southern	12
9. Mid-Western	13
10. Far-Western	17
11. South-Eastern	5

The war-time effort of the dairy farmers and their workers cannot be praised too highly; they have achieved more than was considered possible under the difficult conditions prevailing.

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D.D.T. POISONING

Extensive studies on the toxicity to mammals of the insecticide, D.D.T., have shown that this substance is primarily a nerve poison. In spite of careful investigation among persons who have handled D.D.T., it appears as though the first real case of D.D.T. poisoning has now been reported (*Brit. Med. J.*, 1945, i, 517). The subject was a laboratory worker in perfect health. Being unaware of the risk of absorption through the skin leading to a general intoxication, and being anxious to discover whether D.D.T. was liable to cause any local irritation, he deliberately allowed small quantities of an acetone solution to evaporate on the back of the hand. He also kneaded with the hands a mixture of D.D.T. and an inert dust. No erythema was produced. A few days later, however, aching in all the limbs began and spasms of extreme nervous tension developed. Despite a holiday he was sent to bed with involuntary muscular tremors. He was away from work for ten weeks in all, but even at the end of a year recovery was not quite complete.

CORRESPONDENCE

The views expressed in letters addressed to the Editor represent the personal views of the writer only and must not be taken as expressing the opinion or having received the approval of the N.V.M.A.

Letters to the Editor should reach the Office not later than by the first post on Monday morning for insertion in following Saturday's issue.

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"THE USE AND MISUSE OF SULPHONAMIDES"

Sir,—We would like to join the author of the article, "The Use and Misuse of Sulphonamides," which appeared in your issue, dated May 26th, in a plea for the observance of correct nomenclature relating to members of the sulphonamide group of drugs. If such were followed out, the immediate value of many published reports and clinical communications would be enhanced. On the commercial side it would also go far to limit error and misunderstandings in orders directed to suppliers.

Perhaps the most common error not quoted by Major Hamilton Kirk, and by no means confined to veterinary surgeons, is to refer to sulphanilamide, and to a lesser extent other compounds, as "sulphonamide." The latter term does not identify a particular drug, and it is important to note that the term "sulphonamide" is a group name which should not be used other than in that sense.

Where the use and misuse of individual sulphonamides is concerned we find that your contributor has tended by way of misstatement and ambiguity to create a state of confusion worse confounded and the following comments, brief though they are, will we hope help your readers to obtain a clearer picture.

We are told that sulphapyridine is the most toxic drug in the group. The use of the term "toxic" in this way is a generalisation without precise meaning, and apparently the word is used to cover all forms of reactions and untoward effects which may be encountered clinically in *human* medicine. These reactions vary much in their aetiology but many are examples of individual idiosyncrasy, natural or acquired, rather than direct toxicity. A few examples from human therapeutics may be quoted. Sulphanilamide frequently causes cyanosis whereas this effect is comparatively rare with the heterocyclic derivatives. Apparently the acidiosis produced by sulphanilamide never occurs with the heterocyclic derivatives. The use of sulphanilamide involves no danger of crystalluria whereas precautions against the occurrence of this are among the most important to take during the administration of sulphapyridine, sulphathiazole or sulphadiazine. Skin rashes due to sensitisation are more prone to occur with sulphathiazole than with the stated "more toxic" sulphapyridine.

Likewise in veterinary practice it has, for instance, been proved that sulphanilamide produces untoward effects in poultry, whereas sulphapyridine and other heterocyclic derivatives are well tolerated in this species. Certain of the undesirable side effects produced by sulphanilamide in the bovine, such as severe diarrhoea, are not experienced where therapy is carried out by sulphapyridine or sulphathiazole. It will be seen, therefore, that the word "toxic," in the absence of some definite qualification, can be most misleading when used as a sweeping generalisation.

Ambiguity has also been allowed to creep in at the end of the first paragraph. Your contributor is considering the veterinary application of sulphonamide drugs, but it is obvious he goes on to quote medical experience when he states that sulphapyridine has been superseded largely by more recent additions to the group. In veterinary practice in this country at the present moment it can be stated with some assurance that sulphapyridine is employed extensively and successfully where a range of activity greater than that offered by sulphanilamide is required. In large-animal practice, apart from topical application in the case of sulphathiazole, it appears that few, if any, well defined and authenticated advantages have been claimed for one or other of the newer drugs. This latter observation is, of course, confined to blood-stream active sulphonamides, and does not include those less readily absorbed from the intestinal tract popularly described as the gut-active group—an important development in sulphonamide therapy demanding separate consideration regarding dosage, etc., though this has not been touched upon by Major Hamilton Kirk.

In the fourth paragraph of the article under discussion an erroneous statement appears relating to inadequate dosage. Here it is said that "not only is it valueless, but it would be most likely to induce a condition in the patient of permanent resistance to sulphonamide drugs." The invading organism, or organisms, and not the patient is affected by inadequate dosage, and resistance or reduced susceptibility is therefore associated only with the invader.

For the sake of the "small minority" referred to by Major Hamilton Kirk, might we conclude with a further plea that on increasingly important subjects, such as chemotherapy, nothing less than the most exact data, expressed in the clearest possible terms, should be provided for the practitioner who wishes to keep himself up to date, and more especially the student who is anxious to benefit from modern experience, and equally keen that he should start off on the right track.

Yours faithfully,

R. Paisley,

Veterinary Department,

Pharmaceutical Specialities (May & Baker), Limited.

June 9th, 1945.

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SULPHANILAMIDE E.O.S. IN MASTITIS

Sir,—In the issue of *The Veterinary Record* for January 20th [57, 31] I stated that sulphanilamide E.O.S. in 10 per cent. solution could be used with safety for the infusion of udders of lactating cows that were suffering from non-clinical mastitis. This was in accordance with generally accepted views, although my experience was confined chiefly to the use of the drug in clinical cases of mastitis.

I have recently carried out experiments here which show that the infusion of a normal lactating quarter with 10 per cent. may cause considerable and prolonged depression of the milk yield. Since the sulphonamides are bacteriostatic and not bacteriocidal it would seem that short period infusion of affected quarters would be of little value, and I suggest, therefore, that until such points as the effect of smaller quantities of more concentrated drugs have been investigated, the use of E.O.S. as an udder infusion should be confined to clinical cases of mastitis.

Yours faithfully,

R. W. Roach.

Wallaceville Animal Research Station, Wellington. New Zealand.
May 23rd, 1945.

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DEMOBILISATION OF N.C.O.s AND MEN OF THE R.A.V.C.

Sir,—With the near approach of demobilisation a certain number of N.C.O.s and men of the R.A.V.C. will become available who on account of their Army training are suitable for employment as grooms, farriers, dressers, etc.

In order to facilitate this employment, I will be very pleased to bring to the notice of all ranks R.A.V.C. prior to their demobilisation the contents of the letters of any offers of employment received from veterinary surgeons who may be requiring the services of this type of man.

The question of following up the matter will then be between the veterinary surgeon and the man concerned, but every facility will be given from this depot to make leave, etc., easy for any interview that might be subsequently required.

Letters with full particulars of the employment offered may be forwarded to me at the address given below.

Yours faithfully,

C. H. S. Townsend, Lieut.-Col.
Commanding No. 1 Res. Veterinary Hospital and Depot, R.A.V.C.
R.A.V.C. Depot, The Racecourse, Doncaster.
June 14th, 1945.

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THE VETERINARY SURGEON'S TITLE

Sir,—It is rarely that I am stirred to write publicly, but I feel that even though the subject be somewhat part-worn, this letter, if you can spare the space, may still be relevant.

At this moment I am encamped in the crater of an extinct (or so I fondly hope) volcano "somewhere in Africa," miles from anywhere, hoping for a "runner" to bring me news that "Jerry" is licked. Reading a recently received *Veterinary Record* dated February 17th, 1945, I find Leonard R. Geffen's letter on "The Veterinary Surgeon's Title."

Does "Doctor" Geffen (I daren't call him "Mister" in case his identity is lost with that of a plumber, or dustman) realise that we have been at *war* since September, 1939, and that most of us have been involved in it for all or part of these five-and-a-half years of tribulation, many of us separated from our homes and families, and that, consequently, we just don't wish to hear such idle, whining prattle?

His misinformed foreign patrons might well be told that the average Britisher does not object to being parcelled together with the "plumber, or dustman"; be it remembered that they have saved our skins for the second time in 25 years.

Let us then rather be judged by what we are and do, and not by what we are called. If there is a difference, professionally, between "Doctor" Geffen and a plumber—and this applies equally to all of us—that it will be recognised in time we need have no fear. It is indeed fortunate that Mr. Churchill does not need to be called by any "uplifting" title to prove to the Empire and the world that he is not a plumber at his particular job.

Yours faithfully,

Cyril R. Holmes,
Capt., R.A.V.C.

C/o D.A.D.V. and R.S.,
East Africa Command Headquarters.
May 7th, 1945.

[In view of the fact that the writer of the above letter is on Active Service we have, in these circumstances, waived the intimation that this correspondence is now closed.—*Editor.*]

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R.C.V.S. COUNCIL ELECTION

Sir,—May I take this opportunity of thanking all those who recorded a vote in my favour at the recent Council Election for their most encouraging demonstration of confidence. The fact that in a keenly contested election the votes of my supporters were not sufficient to secure for me a seat on the Council, does not in any way detract from my sincere appreciation, and I hope that I may look forward to the same kind support on a future occasion. The best way in which one can prove worthy of their support is to submit oneself again for election next year and, in the meantime, to strive at every opportunity to strengthen the power of the profession both by individual effort and by supporting those members of the Council who favour the same policy.

Yours faithfully,

Harold Burrow.

Royal Veterinary College, Streatley House, Streatley. Berks.
June 12th, 1945.

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Sir,—May I be allowed through the courtesy of your columns to express my sincere thanks to the Fellows and Members who supported my recent election to the Council of the R.C.V.S.

Yours faithfully,

West Bromwich. H. W. Dawes.
June 18th, 1945.

. . . . . .

Sir,—My warmest thanks to those 445 members who cast their votes in my favour and who have the solid satisfaction that they were part of the great majority of the profession, almost two to one, of those who voted in favour of the retention of the powers of R.C.V.S. intact.

Yours faithfully,

J. Campbell Hill.

Trimley, Llanelly.
June 12th, 1945.

. . . . . .

Sir,—May I express through your correspondence column my many thanks to the members who voted for me in the recent election to the Council of the Royal College of Veterinary Surgeons. I shall endeavour to serve the best interests of the profession to the utmost of my ability.

Yours faithfully,

W. R. McKinna.

20, Ramsden Street, Huddersfield.
June 14th, 1945.

. . . . . .

Sir,—May I be permitted, through the medium of your columns, to express my gratitude to those Fellows and Members of the R.C.V.S. whose votes secured my return to the Council. The election was fought largely on a political issue and the profession expressed itself clearly.

Yours faithfully,

S. J. Motton.

Penzance.
June 16th, 1945.

DISEASES OF ANIMALS ACTS, 1894 TO 1937, AND AGRICULTURE ACT, 1937 (PART IV).

Summary of Returns of Confirmed Outbreaks of Scheduled (Notifiable) Diseases

Period	Anthrax	Foot-and-mouth	Parasitic Mange*	Sheep Scab	Swine Fever
May 16th. to 31st. 1945...	4	1	—	—	34
Corresponding period in—					
1944 ...	8	2	1	1	59
1943 ...	9	—	—	1	11
1942 ...	18	4	—	5	22
Total Jan. 1st to May 31, 1945	48	77	5	37	452
Corresponding period in—					
1944 ...	102	21	6	59	325
1943 ...	143	10	5	98	214
1942 ...	144	16	26	115	186

Note.—The figures for the current year are approximate only.
*** Excluding outbreaks in Army Horses.**

Tuberculosis (Attested Herds) Schemes

The number of Attested Herds, *i.e.*, herds officially certified as free from Tuberculosis as at May 31st, 1945, was as follows:—

England	Wales	Scotland	Total (Great Britain)
4,682	8,602	4,788	18,072